

Hygienic Washroom Facility Locator

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Abstract - The application **Hygienic Washroom Facility Locator** is introduced to overcome the problem of finding restrooms, washrooms that provides services for women's and children. In day to day life when we travel out of city then we don't know anything about the city and it will be difficult to find good washrooms in that city. Finding a toilet is indeed a problem, especially for women. Suppressing the urge to defecate can be detrimental to one's body, according to medical guidelines. But people across the country, especially the women, face this trouble on daily basis. So this system will help to find it easily. Using GPS technology, we will be able to find the nearest washrooms and restrooms to the user. Global Positioning System, which in turn is an interconnected system of satellites and receivers that allows for the precise pinpointing of locations anywhere on or directly above the earth. Maps applications on many smart phones also provide this sort of turn-by turn guidance to help people get on the right streets and take the right exits. The service offers turn by turn directions to bathrooms near you, the ability to see a Google Street view of the location. Due to this system it will become easy to travel all around the world with the help of this application.

Keywords-global positioning system (GPS), satellite, receiver.

I. INTRODUCTION

This application will help to search nearest washrooms easily while traveling in different cities with the help of GPS. When we travel out of city then generally we don't know anything about that city at that time it is very difficult to address particular washrooms and restrooms for women's. At that time this application will help to search it. Using this application, we are able to find restrooms and washrooms without any difficulty. This application will guide you by giving the information about step by step turns and give you exact location. Due to step by step guidance we are able to find washrooms very easily and without any difficulty.

II. GLOBAL POSITIONING SYSTEM

GPS is a commonly-understood acronym that stands for Global Positioning System, which in turn is an interconnected system of satellites and receivers that allows for the precise pinpointing of locations anywhere on or directly above the earth. These sorts of systems have become very popular for everyday navigation, and many cars come with receivers installed to help drivers find their way to their locations. Maps

applications on many Smartphone's also provide this sort of turn-by turn guidance to help people get on the right streets and take the right exits. Beyond this more standard navigation, though, global positioning systems also have a big role when it comes to navigation on the ocean, deep in the forest, and in other largely uncharted areas. The mechanisms used to operate the GPS system as a whole are owned and operated by the United States Department of Defence, though they are free for anyone in the world to use. Just the same, several other countries and regions, in particular Russia, the European Union, and India, have or are in the process of creating their own unique systems, usually to complement the US version but potentially also to augment it and protect local users in the event of failure or other disabling of the services.



Fig.1 : GPS system

As the technology has improved, the cost of devices that include it has plummeted while the accuracy has increased. Small portable receivers have become very affordable, and the accuracy is usually quite good. Accuracy does vary based on a number of factors, but in most places a device will land a person quite close even if the directions aren't perfect. Land-based supplemental devices can sometimes also be used to improve accuracy if higher precision is required.

III. ANDROID STUDIO

Android Studio is the official integrated development environment (IDE) for Android application development. It is based on the IntelliJ IDEA, a Java integrated development environment for software, and incorporates its code editing and developer tools. To support application development within the Android operating system, Android Studio uses a Gradle-based build system, emulator, code templates, and Github integration. Every project in Android Studio has one or more modalities with source code and resource files. These

modalities include Android app modules, Library modules, and Google App Engine modules. Android Studio uses an Instant Push feature to push code and resource changes to a running application. A code editor assists the developer with writing code and offering code completion, refraction, and analysis. Applications built in Android Studio are then compiled into the APK format for submission to the Google Play Store. The software was first announced at Google I/O in May 2013, and the first stable build was released in December 2014.

IV. SQLITE

SQLite is an in-process library that implements a self-contained, server less, zero configuration, transactional SQL database engine. The code for SQLite is in the public domain and is thus free for use for any purpose, commercial or private. SQLite is the most widely deployed database in the world with more applications than we can count, including several high-profile projects. SQLite is an embedded SQL database engine. Unlike most other SQL databases, SQLite does not have a separate server process. SQLite reads and writes directly to ordinary disk files. A complete SQL database with multiple tables, indices, triggers, and views, is contained in a single disk file. The database file format is cross-platform – you can freely copy a database between 32-bit and 64-bit systems or between big-endian and little-endian architectures. These features make SQLite a popular choice as an Application File Format. SQLite database files are a recommended storage format by the US Library of Congress. Think of SQLite not as a replacement for Oracle but as a replacement for fopen() SQLite is a compact library. With all features enabled, the library size can be less than 600KiB, depending on the target platform and compiler optimization settings.

V. SYSTEM ARCHITECTURE

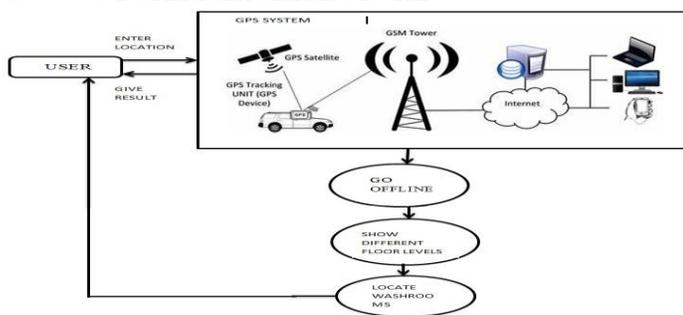


Fig. 2: System architecture

This App consist of valid User registration with Unique Data identification method like Aadhar card or PAN card options to locate nearby free or paid washroom or restroom with facilities like sanitary pad vending machine, Sanitary pad disposal, changing facility etc. also providing rating review option to regulate authorities to maintain hygienic condition.

VI. ADVANTAGES

- Easy to locate washrooms and restrooms.
- Helps to travel easily.
- Helps to provide security menstrual Hygiene facilities for women.

VII. CONCLUSION

Hygienic Washroom Facility Locator will help us for locating facility centre's like restrooms, public washrooms, washrooms in college, hotels, hostels, petrol pump, hospitals, etc. This scenario is no fun at all. But luckily this app out there that make finding a washroom a little easier, and give you more confidence when travelling, running errands, or socializing with friends and family.

VIII. REFERENCES

1. Ankur Chandra, Shashank Jain, Mohammed Abdul Qadeer "GPS Locator: An Application for Location Tracking and Sharing using GPS for JAVA Enabled Handhelds"9780-7695-4587-5/11 26.00 2011 IEEE DOI 10.1109/CICN.2011.85.
2. Abhijeet Tekawade, Ahemad Tutake, Ravindra Shinde, Pranay Dhole, Mr. Sumit Hirve,"Mobile Tracking Application for Locating Friends using LBS" International Journal of Innovative Research in Computer and Communication Engineering Vol. 1, Issue 2, April 2013.
3. Afshan Mulla, Jaypal Baviskar, Amol Baviskar and Aniket Bhovad "GPS Assisted Standard Positioning Service for Navigation and tracking review Implementation"9781-4799-6272-3/15/31.00(c)2015 IEEE.